
Comment Letter I131

I131

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August 30, 2004

CALIFORNIA HIGH-SPEED RAIL AUTHORITY
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To the Attention of the Members of CAHSRA Board

Please find the enclosed document submitted to you as a commentary on the Draft Program EIR/EIS.

You or your representatives may contact me at their convenience to clarify any aspect or any questions with respect to this commentary.

Sincerely,

Douglas Lee Frazier

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SAN FRANCISCO GRAND CENTRAL (SFGC)

A 21ST CENTURY VISION

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EXECUTIVE SUMMARY

This commentary on the California high-speed rail system (HSR), submitted at the end of the environmental review public comment period, addresses the proposed route of the train into the Bay Area.

San Francisco Grand Central, a 21st Century Vision, is a belief that there is a better way to bring high-speed train service into San Francisco and the Bay Area.

When an HSR system is built in the Bay Area, its design should take advantage of the breathtaking views, the spectacle of the natural and man-made setting of San Francisco, and enter the city grandly, on elevated tracks and not through a tunnel to underground platforms.

This commentary was originally intended to offer suggestions to improve the functioning of the redeveloped Transbay Terminal (TBT). It now appears that the Transbay Terminal improvement project will be delayed due to its dependence on significant funding on the High-Speed Rail Program for a shared Caltrain/HSR tunnel extension from the current Caltrain station at 4th and Townsend.

This document was prepared with the certainty that HSR service to San Francisco and the Bay Area may be achievable within the near future by re-examining some of the basic assumptions of the currently proposed route and the consideration of new concepts.

It is the opinion of this commentary that the shared Caltrain/HSR concept was not a balanced solution for the Bay Area as a whole.

Therefore, the proposals herein would accelerate the construction of the HSR into the Bay Area, by making fundamental changes to HST routes, station locations, and station concepts.

In addition, the changes should include substantially more private sector joint development, including sharing of risk and reward. These opportunities are available both to San Francisco and to Oakland.

Another exciting component of these proposals is the opportunity, for the first time, to provide continuous, wide, safe pedestrian paths and bikeways from both Emeryville and downtown Oakland, all the way into downtown San Francisco.

These ideas are offered to assist the California High Speed Rail Authority, The Transbay Joint Powers Authority, Caltrain, the cities of San Francisco, Oakland, and all other interested agencies, individuals and organizations to remain optimistic that HST is appropriate and essential, and should be built as soon as possible to serve all citizens of the Bay Area and California.

In view of the Governor's decision to postpone the Nov. 2004 ballot referendum, until 2006, it is suggested that the EIR not be closed but give another year, until 2005, to allow for more time and further consideration of the HST Project.

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ACKNOWLEDGEMENTS AND LEGAL DISCLAIMER

The author wishes to thank the team that helped him with the revision process of this commentary for their patient and active support. Alphabetically, Veronique Bucherre, PhD writer, geographer and active environmentalist, founder of The Rainbank Group, Ltd.; Patricia Holmes, social anthropologist; Philip Jimenez, Professor of Law in one of the Bay Area best known Universities; and T. Potworowski, a retired telecommunications engineer and former International Executive.

The author would also like to thank all those, notably Bay Area transit commuters, who have provided a further insight by sharing their own experiences and expectations.

This document was prepared by Douglas Lee Frazier, AIA, and, unless specifically noted, reflects only the opinion of the author. It is submitted as a private, unsolicited comment about the proposed California High Speed Rail system and, in particular, how it should enter the San Francisco Bay Area and downtown San Francisco.

All information, comments, opinions, and observations presented in this document were neither commissioned nor sponsored by any public or private organization, and are submitted as a response to CAHSRA's announcement for public comments pertaining to the EIR/EIS for the HST project.

The author submits all due apologies to any individual, organization, consultant, or agency who have studied, in whole or in part, any of the comments in this document and might not be referenced here. The author has endeavored to cite all sources of similar information or research.

Although the writer arrived at the term *San Francisco Grand Central* spontaneously, it has been seen in newspaper articles and is used on a website describing the proposed Transbay Terminal Redevelopment, www.sfcityscape.com. There appears to be general agreement upon the significance of an appropriately "grand" name for the project.

The opinions as expressed by the author in this document, including any original graphic material, are copyrighted. Nonetheless, individuals or organizations interested in issues raised by this document are encouraged to pursue these ideas to further validate or invalidate any or all of the assumptions upon which this document is based.

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SECTION 1 – INTRODUCTION

I. PURPOSE OF THIS COMMENTARY

SFGC suggests that further study of HSR issues for the Bay Area should consider options that were not included in the EIR/EIS review, mainly:

- An aboveground HSR route into Oakland, rather than the proposed underground stations at Oakland 12th Street BART Station and/or West Oakland BART;
- A new HSR route from the Oakland High Speed Train (HST) Station to the existing Bay Bridge eastern approach and Yerba Buena Island, to connect with the West Span of the Bay Bridge;
- Re-use of the existing piers of the East span of the Bay Bridge, if structurally feasible;
- An integrated pedestrian and bikeway sub-structure, attached to these new HST Bay crossings to allow continuous pedestrian and bike commuting from Emeryville and Oakland directly into downtown San Francisco; and
- The modification of the currently proposed Transbay Terminal (TBT) to take advantage of greater private sector funding support and joint development opportunities.

There is a significant difference between "Bullet" as originally used to describe true high-speed trains in Japan, and "Baby Bullet" as used by Caltrain.

Technology applied in Europe and Asia has turned these HSR systems, which were initially intended to complement air traffic, and progressively replaced it, into considerable systems that the best airlines eventually joined to ensure better passenger service and increased revenues.

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Train passengers on what will be the world's most advanced HST system should not be subjected to viewless, sporadic switching delays, freight and commuter trains mechanical problems, and track blockages on a rail network that slowly winds its way into downtown San Francisco on underground tracks.

A dramatic approach above the Bay will greatly intensify the attraction of the HSR approach to travel within California over air/car transportation. Furthermore, such choice has a well-known and widely recognized positive impact on energy and environmental conservation.

II. THE PURPOSE OF SFGC

The purpose of San Francisco Grand Central is to improve HSR service to SF, functionally and esthetically, by creating an innovative engineering design to bring HS trains into SF on new secondary structures attached to the West Span of the Bay Bridge, and into an aboveground extension of the TransBay Terminal.

Rail systems are highly complex linear systems, with profound three-dimensional impacts on served communities. The intent of this document is to consider esthetic and functional issues about the way such a complex linear system may be woven into the fabric of downtown SF.

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The continuation of the rail alignment in the interconnecting approaches to downtown calls for a broad consideration of their impact on the central Bay Area and adjacent communities through which the alignment should pass. It is necessary to consider and quantify a limited number of basic terms and concepts of high-speed trains in general. These concepts are discussed in the text that follows, recognizing, nonetheless, that certain technical issues are beyond the scope of this document.

The EIR/EIS contains three main sections, 1), No Build; 2), Highway/Air; and 3), HSR options.

This document has been prepared as a commentary on a small, albeit important, part of the EIR/EIS, based upon acceptance of the third option, i.e., the complete implementation of a true HST system linking Northern and Southern CA.

With some exceptions, this paper does not address any other part of the EIR/EIS and proposed HST system or areas through which it might run outside the greater Bay Area.

Since, as stated in the EIR/EIS, *no special studies were carried out for a new San Francisco Bay crossing*, it is hoped that this initial commentary will be followed by further consideration. To that effect, this document, updates and reviews can be found at www.sfgc.info

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SECTION 2 - SFGC: A VISIONARY EXPERIENCE

PRIMARY AND SECONDARY STATEMENTS

I. PRIMARY STATEMENTS

A. AESTHETICS: THE VIEWS - The construction of a California HST system in the Bay Area should take advantage of its world famous breath-taking views and enter San Francisco not in dark tunnels but splendidly elevated above the Bay.

CAHSRA (California High Speed Rail Authority) and Caltrain have included a coordinated plan to bring High Speed Trains into San Francisco on the Peninsula and through proposed tunnels into the Transbay Terminal.

In addition, Caltrain Draft Strategic Plan (CDSP) and the Transbay Terminal Redevelopment Plan include brief discussions about continuing the HST through additional tunnels and out to the East Bay underground and underwater, without scheduled time-frames or cost estimates.

These extensions are very important but should not create contingencies for High-Speed Rail implementation.

These previous studies seem to conceive the high-speed train as a deluxe version of an inter-city train. In fact, the HST is more closely related to a jet airliner than to any conventional trains now operating in the US.

The CAHSRA Business Plan is based on direct competition with airline service. A part of the appeal of HSR travel is its ability to provide the experience of flying without leaving the ground and without delayed departures or arrivals.

The success of the CAHSRA Business Plan is less certain if the system cannot deliver as promised, very quickly after announcing the service. A plan that depends on the incremental introduction of service, requiring several years to ramp up to advertised running times may, ultimately, jeopardize wide acceptance by the public.

B. A TRUE 21ST CENTURY PROJECT - Any California HST system should introduce a truly new, 21st Century state of the art system rather than update available remnants of the existing US rail system, some of it dating as far back as the 19th Century.

This is an opportunity to plan appropriately from the beginning without ever having to readjust the aims or the possibilities.

In the August 5, 2004 edition article of the SF Chronicle, Mitchell Schwarzer, an author and professor of Architectural History, addressed the important qualifications for the new SF Planning Director, noting the erosion of an appreciation for high quality planning and urban design in the city.

«The saddest thing has been the silence. During the past decade the S.F. Planning Department [...] has slipped from public view and political importance [...] worst of all,

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quality architecture found no place in a world of design guidelines that forbade innovation [...] City planning in S.F. must swing from reaction back to action. We have to find ways to increase density and alleviate the housing crisis. We have to upgrade the infrastructure, especially mass transit and vehicular corridors leading into the city. We have to encourage a larger role for cutting-edge design».

C. ELEGANT RECYCLING - In view of the current economic difficulties of bridge construction and retrofit costs, each opportunity must be taken to maximize the limited financial resources available. A more efficient project delivery strategy must be developed to embark on this project.

The current Oakland-Yerba Buena Island span could be elegantly recycled as the HST Bridge from Yerba Buena Island into Oakland, thus minimizing new construction and demolition costs.

II. SECONDARY STATEMENTS

A. OPERATIONAL AND PRACTICAL BENEFITS - HST use of shared tracks and tunnels to enter an underground station at the Transbay Terminal would compromise various operational and practical benefits.

1. HST operation in an above-ground approach to the station, as proposed by this commentary, will minimize, if not eliminate, such problems
2. However, the assumption that the HST should run from San Jose to both San Francisco and Oakland during the initial phases, is not in the best interest of the Bay Area and the HST system.

B. PRIVATE SECTOR INVESTMENT - More efficient planning, design, construction, and commissioning processes are required, and must incorporate substantially larger shares of private or joint development investment.

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SECTION 3 - UNDERGROUND PLATFORMS VS. CITY LIGHTS

Table 1 makes a point-by-point comparison between Caltrain's proposed Peninsula and underground approach into San Francisco and San Francisco Grand Central proposed East Bay and aboveground approach into San Francisco.

TABLE I: COMPARISON TOWARD A BETTER CHOICE

A. CALTRAIN PENINSULA APPROACH	B. ADVANTAGES OF SFGC
1. According to The EIR/EIS proposal, i.e., to bring the HST into the Transbay Terminal via shared underground tracks entails some delays that, though manageable to some degree, will be a permanent <i>handicap</i> and limitation on passenger operations of both systems.	1. A HSR should be designed to take maximum advantage of technical and technological developments with respect to safety, speed, and comfort. Keeping the HST separate from Caltrain or any other conventional rail system will allow these advances to be implemented more quickly and efficiently. In addition, a shared underground approach to the Transbay Terminal will impose immediate and permanent restrictions on the expansion of HST service. Consequently, it will prevent the development of the HST to its full potential in Northern California and, in particular, the Bay Area and will seriously limit expansion of Caltrain to the TransBay Terminal.
2. The shared or parallel tracks of the HST and Caltrain on the Peninsula would be essentially redundant. The CAHSRA Business Plan, i.e., to share service with Caltrain, seems to indicate that both systems will gradually lean toward similar services, with the Baby Bullets experience and HST making multiple stops on the Peninsula.	2. There is less redundancy between HST and BART or between HST and the Capitol Corridor on the SE Bay. BART is an intensely used commuter rail and the Capitol corridor, although considered an intercity train by Amtrak, functions more like a commuter train, with groups of commuters riding only for segments of its total service length. The ability of a transportation service to attract passengers depends, in part, on how potential riders perceive these advantages. To that effect, one element of perception stems from the array of services offered by the system.

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	<p>It is not clear just how their services will differ and this may point to a plan in the making to merge both systems into one. Until then, in the eventuality of a problem caused by one of the systems, passengers of either system might not readily understand the shared operations. As a result, they may blame the wrong system or, worse yet, blame both systems. On the other hand, delays experienced by one system may influence dissatisfied passengers in their continued support and patronage of a specific system. The systems must demonstrate their own ability to deliver the advertised level of service or be ready to suffer the consequences of discontented patrons. This, in itself, is a strong incentive to a better performance: the system must unrelentingly compete with itself – a most demanding challenge.</p>
3. The current Caltrain right of way is the only option for shared rail right of way on the Peninsula.	<p>3. In contrast to the singular Caltrain rail right-of-way on the Peninsula, the SE Bay route has multiple rail right-of-ways between Oakland and San Jose. Although BART and the freight railways own all of these, there are more potential options for planning and negotiating the alignment sharing (with the exclusion of operating systems or tracks) for the HST.</p> <p>Expectedly, property acquisition for expanded rights-of-way on the Peninsula will be costly and may require use of eminent domain. The <i>magnitude</i> of these costs is acknowledged in the Caltrain Draft Strategic Plan (CDSP) for the various scenarios. On the Bay, major property acquisition should not be required for most of the alignment from Oakland to San Jose, if appropriate rights-of-way access agreements can be negotiated with BART or the freight railway property owners.</p>
4. The EIR/EIS proposes, urban stations	4. Minimizing the number of station

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located approximately 15 miles apart. This blurs the difference between HST and the Baby Bullet trains.	<p>locations is critical to efficient high-speed rail operations but the train must stop at enough places to generate the projected revenues. Between Oakland and San Jose, the current Capitol Corridor/Amtrak service provides service at approximately 15-mile intervals and serves the low end of the EIR/EIS station spacing. This station spacing service is now also provided by the Baby Bullets on the Peninsula. In keeping with efficient HST schedule planning, station spacing should be approximately 50 miles, except for key stations such as major urban centers and airports.</p>
5. The future of freight traffic on Caltrain tracks is also at stake. How far north on the Peninsula do the freight trains travel? Even if they operate primarily at night, they will pose an operational conflict with the HST. Not unlike Caltrain, which is, by definition, a commuter railway carrying most of its passengers at rush hours, the HST will also have rush hour peaks. However, it will most likely serve substantial numbers of longer distance commuters, traveling to and from Southern California who will depart earlier in the morning and arrive in large numbers, later into the evening. These high-speed passenger operations would conflict with slow, evening hour freight operations	<p>5. Freight railway operations on the East Bay are substantially more extensive than on the Peninsula. The freight system plays a significant part in the Bay Area and the region's economy. It is essential to obtain their cooperation and it would be to everyone's advantage to gain their support. This is better achieved with the understanding that the HSR system should in no way interfere with freight operations, since the two systems are separate in concept. The issue is not simple and is beyond the scope of this comment.</p>
6. The Caltrain DSP suggests that the ultimate system (The Build-out Scenario) would be four parallel tracks running from San Francisco to San Jose. How much of this right of way is now under Caltrain control? At what cost would this be accomplished?	<p>6. The evaluation of right-of-way acquisition on both sides of the Bay should be given a clear and direct analysis if CAHSRA is not able to proceed with preliminary design of both routes. Bay Area voters need to understand the time frame and costs for each route if only one is to be implemented¹.</p>
7. The Caltrain route on the Peninsula runs directly through or in close proximity to dense residential communities. Will these	7. Residential development is intensive on the East Bay; however, extensive tracts of unutilized or under utilized industrial

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¹ Amtrak may join Caltrain in designing a tunneled, underground and under water approach into the San Francisco Transbay Terminal, and offer Coast-to-Coast service.

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communities be receptive to the additional railway construction that, by HSR definition, will not serve most of them directly?	property lay along the existing freight rail and BART rights-of-way. These properties are inherently less sensitive to infrastructure enhancements than residential property. Individual communities must render approval for construction of the HST through their respective communities. Depending upon the specific routes chosen, more or less community approval will be required. Given the more limited number of communities on the East Bay than on the Peninsula (approximately one third); the approval process would go forward more efficiently on the East Bay. Caltrain and the CAHSRA will have to negotiate with a larger number of communities to obtain their approval prior to expanding Caltrain's right-of-way on the Peninsula. (See Annex 1 - Table II: <i>Involvement of Bay Area Communities</i>)
8. With how many individual property owners will Caltrain and the CAHSRA have to negotiate to expand Caltrain's right-of-way on the Peninsula?	8. On the East Bay, the number of individual property owners with whom acquisition negotiations would be required should be significantly fewer than on the Peninsula. The parcels adjoining the potential rights of way on the East Bay are generally larger and fewer in number, which should allow a shorter acquisition process
9. What are the implications of installing a new signal and communications system to accommodate joint operations on the same tracks by Caltrain, HST and freight trains	9. The Caltrain DSP acknowledges that, in order to run on shared tracks, new signal and communications systems would be required. There is a whole sub-discipline of signal and signaling communications, described as systems integration, used when rail traffic is mixed. It is possible to eliminate or at least minimize this technology while providing straightforward operations, if tracks are not shared.
10. According to the preferred Alternative Study, 3 tracks are proposed. EIR/EIS does not include projections about how Caltrain and HST schedules and operations will be coordinated with the	10. It is not clear how many approach tracks can realistically be constructed under Rincon Hill to insure optimum train frequency for both HST and Caltrain.

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proposed platforms.	
11. Where will routine HST train cleaning and servicing occur?	11. Cleaning and servicing of terminating express trains can be done from passenger platforms but it is not ideal. This strategy poses an even greater problem if Caltrain and HST share the same tracks, and passengers of both systems -- with possibly conflicting schedules-- share the same platforms. In the proposed SFGC Station, these services may be addressed by temporarily restricting passenger access to the HST specific upper platform, thus reducing passenger inconvenience. It may also be possible to locate a cleaning crew at the proposed Oakland Station. In addition, potential rights-of-way with multiple tracks and platforms appear to be available in Oakland.

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SECTION 4 – SAN FRANCISCO GRAND CENTRAL

I. INTEGRATION WITH THE TRANSBAY TERMINAL

Height - The height of the HSR Terminal is determined by gradient limitations for level platforms at station.

Radius - Existing radius of the area above the Transbay Terminal access ramps is approximately 750 feet and may accommodate smooth quiet arrival and departure of trains.

Platform length - Available site conditions appear to allow platforms of about 1300 feet long.

Tracks - As the HST approaches SFGC, the tracks must fan out into at least three tracks to allow as many passenger platforms as possible. This document considers the minimum number of adequately sized passenger platforms to be six.

HSR Platforms - HSR platforms would be the top level of the HSR terminal and all ticketing, baggage, and related concourse level activities would be located on floors below. These lower floors will be interconnected to the floors of the Transbay Terminal, providing potential development of these areas based on the conceptual design in the Transbay Development Report. The only significant change is the removal of the HST component from the lower levels of the Transbay Terminal.

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SECTION 5 - DESCRIPTION OF BAY AREA SEGMENTS

This descriptive summary of the segments is organized in the sequence through which the HST would travel enroute from San Jose to SFGC. The sequence of segments begins as the railway enters the south edge of downtown Oakland. (See Sketches N° 1, 2 and 3)

I. SOUTH OF OAKLAND AND DOWNTOWN OAKLAND

An elevated or viaduct structure is assumed to carry the railway into a new station located adjacent to the south side of Route 880, located between Broadway on the southern or eastern end and Market Street on the north or west. The station is located to allow the option of a new BART station under and within the HST station.

A. MAIN FACTORS IN STATION SELECTION FOR OAKLAND

1. Appropriate alignment with adjacent segments
2. Walking distance to Downtown Central Business District,
3. Walking distance Jack London Square and Amtrak Station,
4. Preservation of maximum areas of existing fabric of Jack London Square entertainment district and nearby historic industrial and commercial structures,
5. Option to explore BART transfer Station with the alignment,
6. Opportunities to use private sector joint development to enable the Oakland Station to become a catalyst for planned public and private investment in the area to establish appropriate new construction of residential, retail, commercial and light industrial structures and facilities.

B. OTHER IMPORTANT FACTORS

1. The Oakland Station also has the potential to become a major East Bay Intermodal Transit facility if a new BART Station is feasible within or immediately adjacent to the station. The Station will obviously have direct access to I-880 and I-980 for AC Transit and other bus systems.

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The Oakland HST Station may also have significant joint development potential due to the existing low-density uses and scattered vacant parcels. This Station site, including its adjacent area, between downtown Oakland and Jack London Square, has undoubtedly been the subject of numerous planning studies and this recommendation may even conflict with critical projects in planning phases.

If the fate of the suggested site, or substantial portions of it, has already been determined, alternate sites can be studied. The issue of the location of an acceptable HST Station site in Oakland, above ground, is critical to the entire message of this commentary, i.e., that the urgent transportation issues for California, coupled with diminishing availability of major funding from public sources, necessitate a review of the entire strategy of bringing HST into the Bay Area.

The EIR/EIS concluded that the Oakland HST could not be co-located with the existing Amtrak Station. The opinions of this commentary concur, based upon the above-mentioned criteria. Further detailed investigation of HST coordination with the Amtrak Station, under updated criteria may be appropriate, but is beyond the scope of this document.

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Opportunity, the Amtrak station is not far from the proposed location shown on the topography is relatively flat. Passengers with baggage or children, or mobility-impaired passengers transferring between Amtrak / Capitol Corridor trains, downtown Oakland, and the HST network, can now be transported by the local Shuttle Bus. These passengers also could be served by a small fleet of electric or pedal powered taxis, a potential tourist feature.

During busy holidays, weekends and festivals, some adventurous entrepreneur may be willing to try a horse and carriage operation to link the Amtrak Station with the proposed HST Station. Ultimately, Oakland may find that a fleet of downtown streetcars may be the best long term goal for this type of connection, as successfully demonstrated in Portland, Seattle, Denver, San Diego, San Jose, and of course the overwhelming successful MUNI F Line in San Francisco.

II. OAKLAND STATION TO BAY BRIDGE APPROACH

A. The proposed alignment from the Oakland Station to the northwest to the Bay Bridge is located immediately south of the I-880 elevated roadway. It will need to merge with the existing freight railway alignment and requires negotiations with the freight railroad owners for permission to construct the HST tracks in such a way that they will not interfere with the movement of freight trains.

B. This is not a simple request and should be planned in such a way that both the HST and the freight rail owners will benefit from this shared use.

III. RECYCLED BAY BRIDGE PIERS - See East Span Bridge

A. The proposed bridge cross section is intended to use the existing East Span piers that would otherwise be demolished when the new East Span is complete, subject to a complete civil/structural analysis to verify their suitability for this use. At this time, without such detailed information, the assumption is made that, due to the significantly lower total loads, the existing piers would be adequate.

B. It is further assumed that the physical dimensions of the piers will also support more than the relatively light HST loads. They have been illustrated with a proposed light rail system that would be the basis of restored East Light Rail system which could cross to YBI, between the HST tracks and descend to YBI to make a loop of Treasure Island and support the important redevelopment plans, now underway.

IV. YERBA BUENA ISLAND TUNNELS

A. The Metropolitan Transportation Commission (MTC) Bay Bridge Rail Feasibility Study of July 2000 contains a discussion of tunnels through YBI. This document accepts the proposition that a pair of tunnels is feasible to construct through YBI.

B. The specific design and location of these tunnels will align the HSR tracks with the outside of the west span of the Bay Bridge (described in the following Segment Section) where it is anchored to the land mass of the Island and where the lattice tubes will continue to carry the HST into S.F.

V. PEDESTRIAN PATHS (See Section 9 – Pedestrian and Bicycle Commuting, and Maps)

A. YBI and Treasure Island residents, workers, visitors and tourists have the option to use either pedestrian tube on the Bay Bridge to access the islands and the proposed ferry terminal in the existing harbor. See additional discussion on this proposed ferry service in Chapter 11, Related Issues

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B. Pedestrian paths from the Bay Bridge Eastern and Western spans will connect at YBI allowing a variety of pedestrian and biking options from complete Transbay commuting on a daily basis to short partial crossings with options to connect to ferry service for a combined mode round trip.

C. A significant additional pedestrian option is the extension of the pedestrian tubes over the new HST Bridge to and through the Oakland Army Base. This optional route would allow easy bicycle commuting from the downtown Oakland area with access to the new Middle Harbor Shoreline Park.

VI. BAY BRIDGE

A. A basic premise of this proposal is that it is realistic to re-examine the MTC Bay Bridge Rail Feasibility study, prepared by consultants for the MTC in July 2000 and update the evaluation criteria. It is assumed that more detailed structural analysis of the Bridge and investigation of more creative structural solutions would indicate the concept is feasible.

B. Any definitive engineering analysis or recommendations are entirely beyond the scope of this commentary. A more focused discussion of Engineering issues is included in Section 8.

C. To restate the qualifications to the scope of this document from the Introduction, these comments are offered to continue a more detailed dialogue of the issues of HST service for the Bay Area and update the discussion with relevant current issues.

D. The Sketch also indicates the continuation of the pedestrian path and bikeway that originated with connections from bike and pedestrians routes on the East Bay, in Emeryville.

E. Also included in the sketch, shown dotted, is a proposed automated people mover transit system that will provide the commuting link from Treasure Island to San Francisco. Adding this system to the Bridge is not discussed at any length in this document. It will be included in the list of Related Issues, in Section 10, for future study.

F. The HST will not be traveling at high speed on the Bridge. In fact, it should cross the Bridge at about the speed of commuter traffic, between 40 and 50 miles per hour, continuously decelerating as it approaches the final turn into San Francisco Grand Central. Trains that are departing SFGC could probably travel at higher speeds but during the crossing, the view is one that most passengers will probably enjoy at less than the fastest possible speed. Most passengers, even regular business passengers, will probably interrupt their reading or discussions to enjoy the view.

A longer discussion of the Visual Considerations is included in Section 7;
A longer discussion of the Pedestrian and Bikeway components is included in Section 9;
A longer discussion of the Engineering Concept is included in Section 9.

VII. THE EMBARCADERO

Here the HSR tubes will begin to depart from direct alignment with the Bay Bridge deck structure and will ascend or descend, as required to begin alignment with the final slow turn into the HST Terminal at SFGC.

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VIII. RINCON HILL

- A. Passing over Rincon Hill, the HSR lattice tubes will return to a more conventional viaduct, although a high, wide, and structurally complex deck, supported by foundations that must be coordinated with the new Transbay bus viaducts and other Bridge approach modifications now under way.
- B. Rincon Hill, in addition to being the west end of the Bay Bridge, is an established residential neighborhood with all of the concerns that residents of any community would have. The impact of infrastructure projects such as these on Rincon Hill is profound. It is the intent of this proposal to coordinate in every possible way with recent detailed planning studies and approved development plans, while addressing the severe financial and operational issues of the proposed HST station co-located under the redeveloped Transbay Terminal. It should be noted that the proposed above ground HST is essentially located in what could be described as "air-rights" space of existing bus and car freeway off ramps and the extended right of way of Essex Street.
- C. The urban design challenge of gracefully inserting this major new element into Rincon Hill is acknowledged as both difficult and controversial. It is the sincere hope of this proposal that, before the concept is rejected out of hand, that highly qualified planners, urban designers, and architects be given an opportunity to explore various configurations. The opportunity for more housing is always a first thought but any uses must be explored within the context of the approved plans and surrounding context.
- D. It is further proposed that the intermediate space that will be created below the HST platform level, be considered to provide physical fulfillment for some of goals of the Rincon Hill Plan.
- E. With respect to rail engineering track geometry, it is expected that the proposed turning radius from the Bay Bridge approach into the SFGC Terminal, approximately 750 feet, should provide a quiet slow arrival and departure for the high speed trains. Individuals who have visited Europe and Asia and traveled on those high speed trains can verify that the trains glide into and out of the stations nearly without noise.
- F. The proximity of the HST Terminal Building to existing and proposed buildings may not be in agreement with existing planning guidelines and zoning regulations. This may be the type of challenge for the new SF Planning Director that Michael Schwarzer was referring to in the SF Chronicle article quoted in the Introduction to this proposal.
- G. The primary pedestrian access to the pedestrian tubes is considered to be at Spear Street where there is a direct interface with MUNI, waterfront attractions. See additional discussion of the Pedestrian and Bikeway Component in Section 9.
- H. The residents of Rincon Hill should be asked whether the Pedestrian and Bikeway tubes should continue into the community or terminate near the Spear Street entrance. If the residents decide that the system should extend into the edge of the neighborhood, the degree of access that non-residents might have to their points of access should be considered.

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V. SAN FRANCISCO GRAND CENTRAL

Finally, the HST will arrive at the Terminal Station after making a slow right turn at the same point as the existing Fremont Street Ramp, although at a higher elevation. See the discussion of SFGC in Section 4.

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cont.

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